

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY AND KENTUCKY	)	
UTILITIES COMPANY FOR CERTIFICATES OF	)	
PUBLIC CONVENIENCE AND NECESSITY FOR	)	CASE NO.
THE CONSTRUCTION OF A COMBINED CYCLE	)	2014-00002
COMBUSTION TURBINE AT THE GREEN RIVER	)	
GENERATING STATION AND A SOLAR	)	
PHOTOVOLTAIC FACILITY AT THE E.W.	)	
BROWN GENERATING STATION	)	

COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION  
TO LOUISVILLE GAS AND ELECTRIC COMPANY AND  
KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively "the Companies"), pursuant to 807 KAR 5:001, are to file with the Commission an original paper copy and an electronic copy of the following information, with a copy to all parties of record. The information requested herein is due no later than April 24, 2014. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

The Companies shall make timely amendment to any prior response if they obtain information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which the Companies fail or refuse to furnish all or part of the requested information, they shall provide a written explanation of the specific grounds for their failure to completely and precisely respond.

Careful attention should be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request.

1. Refer to the response to Item 18 of Commission Staff's Initial Information Request ("Staff's First Request"). The Companies clarify that having excess capacity and energy is often viewed negatively by Commissions. Specifically, they note that regulators are reluctant to allow excess capacity costs to be included in rates for the reason that the capacity is not considered used and useful and thus, would unnecessarily increase customers' costs. Refer also to the response to Item 16 of Staff's First Request that shows Reserve Margin Excesses (at the 15 percent reserve margin) into the 2023/2024 timeframe, assuming the Green River natural gas combined cycle ("NGCC") and Brown solar projects are approved.

- a. Clarify this dichotomy.
- b. If the Commission accepts the capacity as filed, will the planned solar capacity exacerbate the increase to customers cost as discussed above?

2. Refer to the response to Item 26 of Staff's First Request. The Companies state that in staying consistent with past resource assessments, they assume no access to energy from the market and no off-system sales as they plan generation. With access to the PJM and MISO markets, is it in the best interest of the Companies' ratepayers to construct excess generation? Correlate this response with the response to Item 1 above.

3. Refer to the response to Item 28 of Staff's First Request. The Companies state that the amount of solar energy received in central Kentucky is below the average for the continental United States. Given such, have the Companies performed any studies which compare purchasing solar power to generating solar power?

a. If so, provide the studies/comparisons.

b. If not, explain why such studies were not performed?

4. Refer to the Attachment to the response to Item 34.a. of Staff's First Request. The chart shows capacity factors for different scenarios. Explain the significant decline in the capacity factor from 2018 to 2042 in the first and seventh scenarios presented.

5. Provide the useful life of a solar facility like the one proposed at the Brown Station.

6. Refer to the response to Item 69 of the Attorney General's Initial Request for Information ("AG's First Request"). The response states that there are 66 full-time KU employees and 13 contractors that perform maintenance at the Brown Station. Reconcile the numbers provided here with those provided in the response to Item 7.b. of Staff's First Request.

7. Refer to the response to Item 130 of the AG's First Request. The response states that "[c]ompared to the Green River unit, total fixed and non-fuel operating costs are assumed to be lower for the Cane Run unit." Explain the reasons for this.

8. Refer to the response to Item 198.h. of the AG's First Request. Explain why the Companies did not make a counteroffer.

9. Refer to the public comments filed by Big Rivers Electric Corporation ("Big Rivers") on April 4, 2014 ("Comments").

a. Refer to page 3 of the Comments, lines 3-15. Explain why excluding off-system sales opportunities from the Companies' analyses would not "introduce a systematic bias that penalizes coal resources."

b. Refer to page 6 of the Comments, lines 1-5. Explain whether the Companies believe it is accurate that "natural gas prices at the low level paired with mid carbon is much less likely than natural gas prices at the mid or high levels paired with mid carbon."

c. Refer to page 6 of the Comments, lines 21-26, and the graph provided on page 7. Big Rivers states that, according to the United States Energy Information Administration, carbon price scenarios are expected to correspond to higher natural gas prices and that, had the Companies adjusted the probabilities or the natural gas prices for this relationship in their analyses, "the Green River NGCC would have been a less favorable option." Explain why the Companies did not adjust for this relationship in their analyses and describe how their analyses would have been affected if they had adjusted for it.

d. Refer to pages 7-9 of the Comments, which argue that the imputed debt adjustment used by the Companies overstates the impact of the imputed debt adjustment because it includes only the cost of additional equity needed to balance capitalization, but not a corresponding reduction in debt when the additional equity is applied to reduce overall debt.

(1) Explain how the Companies' imputed debt adjustment does not overstate the impact of the imputed debt adjustment as asserted by Big Rivers.

(2) Provide the risk factor used for calculating the imputed debt associated with purchase power agreements in the Companies' analyses and explain how it was determined.

e. Refer to page 11 of the Comments, lines 23-25. Explain whether the Companies believe it is accurate that "[s]ince the Applicants give equal weighting to each natural gas price scenario (probability 0.333), the probability that gas prices are mid or high (and that deferral is preferable) is 67%." If not, provide an explanation.

f. Refer to page 12 of the Comments, lines 2-5. Explain whether the Companies believe it is accurate that "the Applicants should have gone further and considered the added benefit of waiting to learn more information about the three key uncertain factors identified by the Applicants: load growth, natural gas prices and carbon policy." If not, provide an explanation.

10. Refer to the response to Item 6 of the Kentucky Industrial Utility Customers, Inc.'s Initial Information Request, which was filed with a petition for confidential treatment.

a. Refer to the second and fourth bullet points on page 23 of 232, the fourth and sixth bullet points on page 30 of 232, and the first bullet point on page 31 of 232. Explain why the Companies are not proposing to defer construction of the NGCC to the later date shown in these bullet points.

b. Refer to the fifth bullet point on page 30 of 232. With the risk of carbon regulations being a critical component of the Companies' proposal to build the Green River NGCC and Brown solar facility, explain why it would not be beneficial for the Companies to delay a decision on the proposed construction until they have more information on carbon regulations.



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Jeff Derouen  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED APR 10 2014

cc: Parties of Record

Honorable Kurt J Boehm  
Attorney at Law  
Boehm, Kurtz & Lowry  
36 East Seventh Street  
Suite 1510  
Cincinnati, OHIO 45202

Honorable Lindsey W Ingram, III  
Attorney at Law  
STOLL KEENON OGDEN PLLC  
300 West Vine Street  
Suite 2100  
Lexington, KENTUCKY 40507-1801

Honorable Robert M Watt, III  
Attorney At Law  
STOLL KEENON OGDEN PLLC  
300 West Vine Street  
Suite 2100  
Lexington, KENTUCKY 40507-1801

Joe F Childers  
Joe F. Childers & Associates  
300 Lexington Building  
201 West Short Street  
Lexington, KENTUCKY 40507

Honorable Michael L Kurtz  
Attorney at Law  
Boehm, Kurtz & Lowry  
36 East Seventh Street  
Suite 1510  
Cincinnati, OHIO 45202

Jody Kyler Cohn  
Boehm, Kurtz & Lowry  
36 East Seventh Street  
Suite 1510  
Cincinnati, OHIO 45202

Rick E Lovekamp  
Manager - Regulatory Affairs  
LG&E and KU Energy LLC  
220 West Main Street  
Louisville, KENTUCKY 40202

Larry Cook  
Assistant Attorney General  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Heather Napier  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Gregory T Dutton  
Assistant Attorney General  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Honorable Kendrick R Riggs  
Attorney at Law  
Stoll Keenon Ogden, PLLC  
2000 PNC Plaza  
500 W Jefferson Street  
Louisville, KENTUCKY 40202-2828

Angela M Goad  
Assistant Attorney General  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Ed Staton  
LG&E and KU Energy LLC  
220 West Main Street  
Louisville, KENTUCKY 40202

Honorable Dennis G Howard II  
Assistant Attorney General  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Honorable Allyson K Sturgeon  
Senior Corporate Attorney  
LG&E and KU Energy LLC  
220 West Main Street  
Louisville, KENTUCKY 40202